### What LTC Facilities Need to Do to Prepare for and Respond to COVID-19



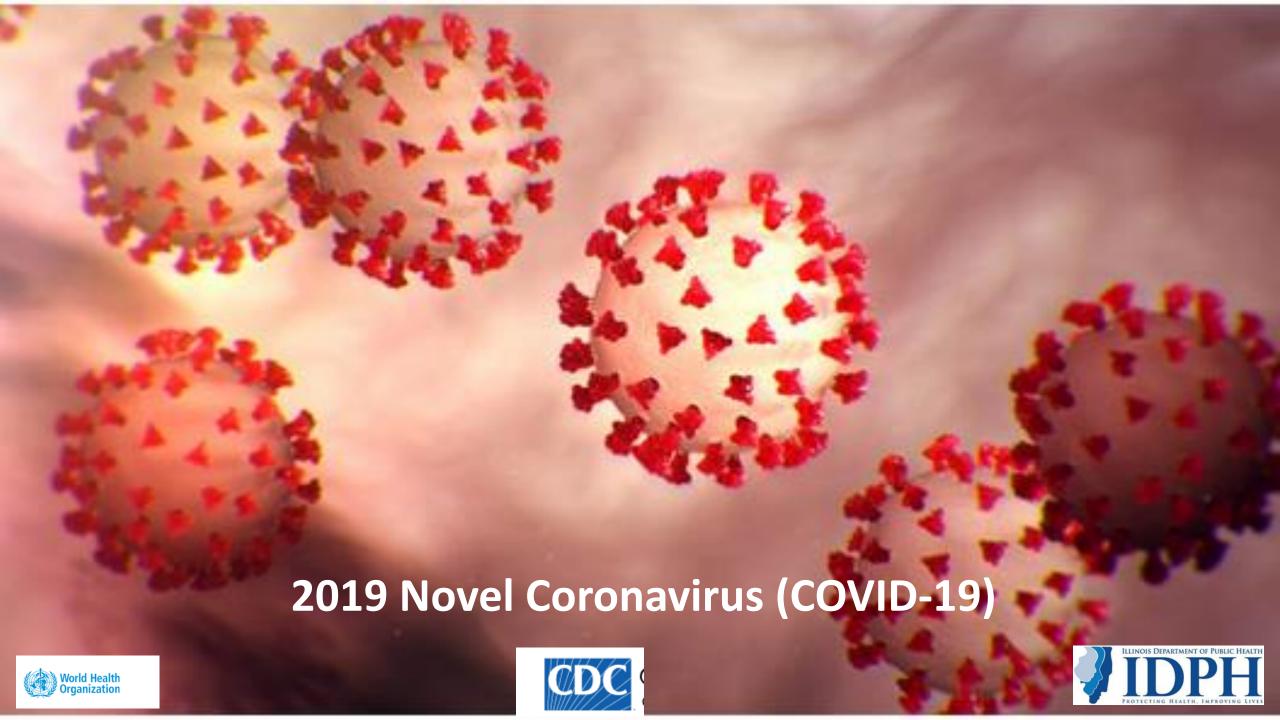


#### Objectives

- Understand the different degrees of illness caused by coronaviruses, including coronavirus causing COVID 19
- Explain the guidance from IDPH and CDC related to COVID 19 control measures
- Implement a COVID 19 control plan using and interdisciplinary approach







#### Common Human Coronaviruses



- Include types 229E, NL63, OC43, and HKU1
  - May be on respiratory viral panel (RVP)
  - These are **NOT** COVID-19
- Usually cause mild to moderate upper-respiratory tract illnesses like the common cold.
  - Runny nose
  - Headache
  - Cough
  - Sore throat
  - Fever
  - Malaise
- Can cause lower-respiratory tract infections
  - Cardiopulmonary disease, impaired immune function, infants, and older adults more vulnerable

#### COVID 19 (coronavirus disease 2019)

- Novel (new) coronavirus (SARS-CoV-2) first detected in China
- Beta coronavirus like SARS and MERS-CoV
- People have no immunity
- 80% of people have mild illness (range very mild to pneumonia not requiring hospitalization)
- Healthy children contracting at same rate but with few to no symptoms <sup>1</sup>
- Serious illness in approximately 16% of cases
- China CDC: over 70,000 people, over 40,000 with confirmed COVID 19: Case fatality rate with people over 70 years was approximately 8% and over 80 years almost 15% <sup>2</sup>
- 1. Quifang Bi, et al., 2020: 2. China CDC Weekly, Feb 20, 2020





The Novel Coronavirus Pneumonia Emergency Response Epidemiology Team. The Epidemiological Characteristics of an Outbreak of 2019 Novel Coronavirus Diseases (COVID-19) — China, 2020[J]. China CDC Weekly, 2020, 2(8): 113-122.



72,314 records, 44,672 confirmed cases COVID19



1,023 deaths: Overall case fatality rate 2.3%

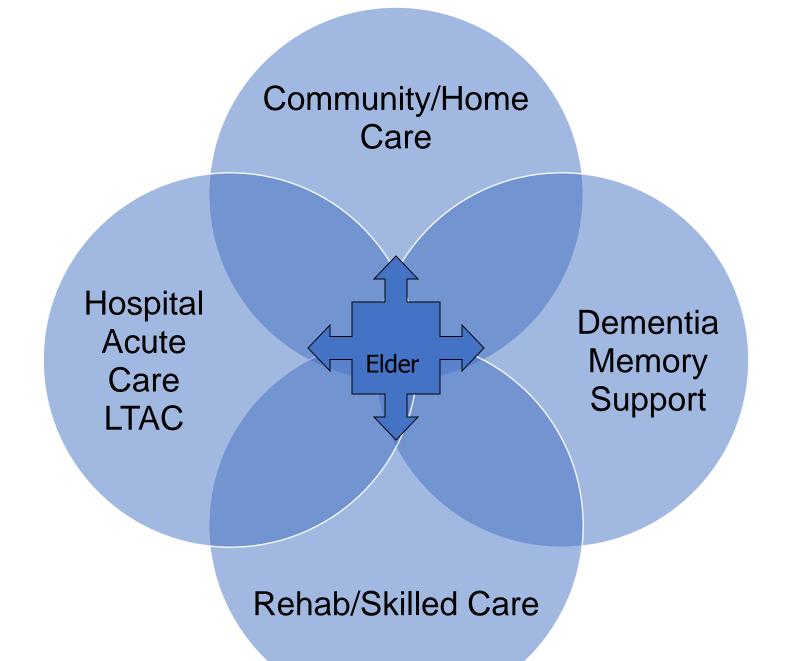


80.9% had mild disease



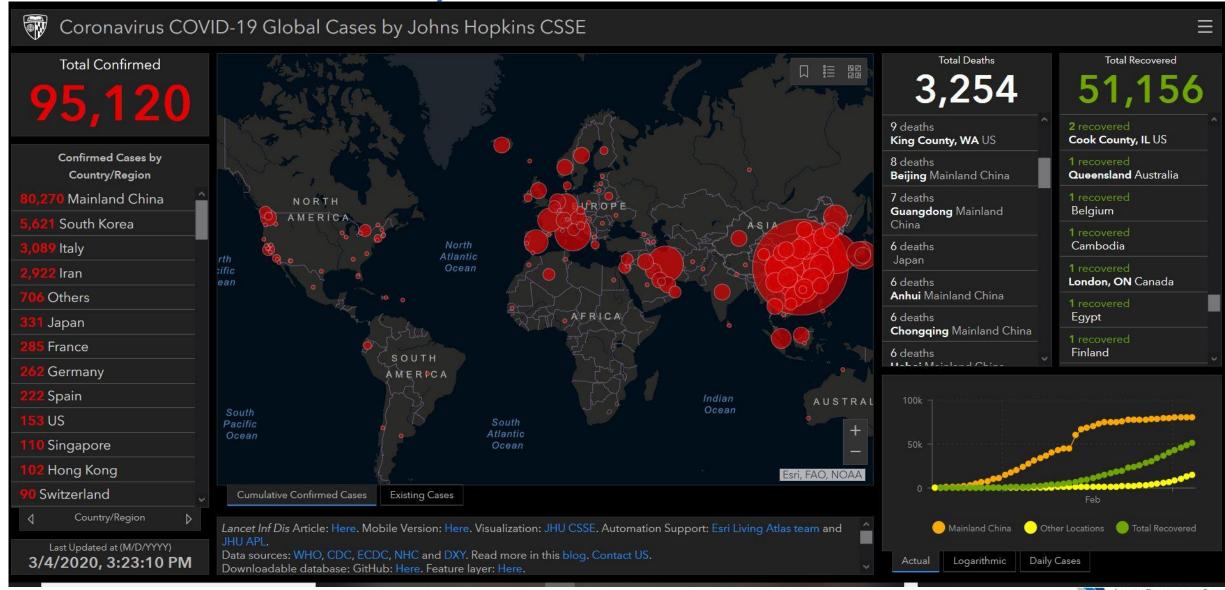
Case fatality rate in persons 80 years and older: 14.8%





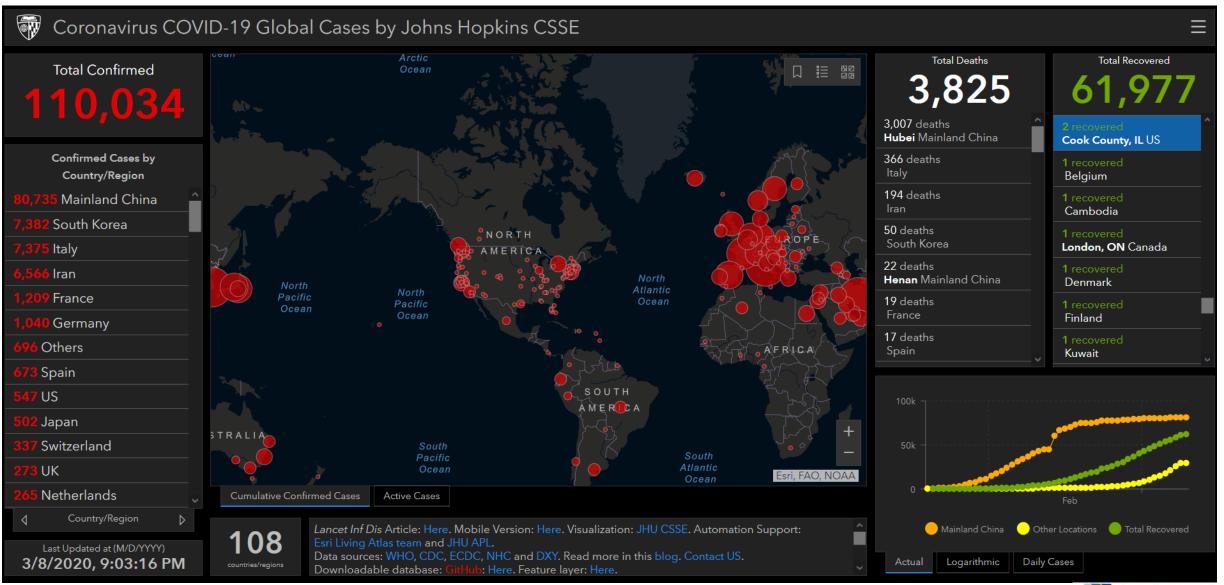


#### Total Cases March 4, 2020





#### Total Cases March 8, 2020





#### Total US Cases March 8, 2020



#### 'Still in triage mode': More residents, employees of Kirkland nursing home are hospitalized with coronavirus symptoms

March 8, 2020 at 2:32 pm | Updated March 8, 2020 at 6:27 pm





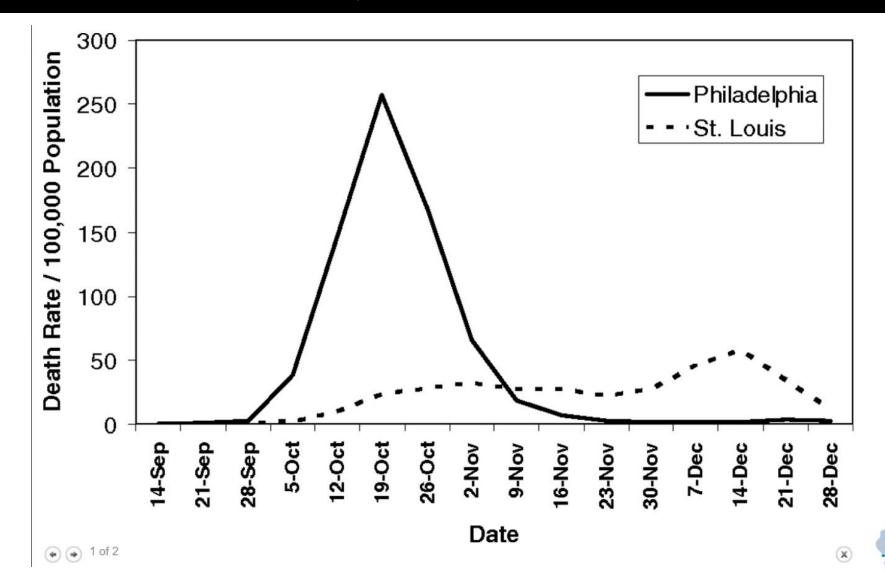


#### Common Sense Quick Response 1918

- In 1918 St. Louis introduced a broad series of public health measures to contain the flu within two days of the first reported cases
- Philadelphia, New Orleans and Boston all used similar interventions, but...
- ...They took longer to implement them, and as a result, peak mortality rates were higher
- In the most extreme disparity, the peak mortality rate in St. Louis was only **one-eighth** that of Philadelphia



#### Hatchet, Mecher, Lipstich (2007) Excess P&I mortality over 1913–1917 baseline in Philadelphia and St. Louis, September 8–December 28, 1918



#### Suggested Approaches

- Focus on keeping COVID 19 out of long term care
- Interdisciplinary planning and communication
- Clean hands
- Clean equipment and surfaces
- Contained droplets
- Respiratory Etiquette
- Age restrictions
- Health screen and questionnaires
- Use technology
- Reduce face to face opportunities for spread
- Inventory Control



#### Communication

- Communication is vital
- Involve entire interdisciplinary team BEFORE you have a case
- E-mail blasts, letters to residents, families, and staff, closed circuit communication, screen savers
- Constant communication
- Up to date scripts for receptionists, intake personnel
- Keep everyone up to date, and keep information up to date
- Transparency
- Communicate to staff how they will be supported when symptomatic







## Clean, Disinfect, and Contain

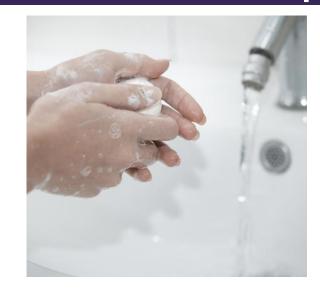
- Clean hands
- Clean/disinfected equipment and surfaces
- Contained Droplets
- Rapid identification and source control
- CDC Respiratory Etiquette



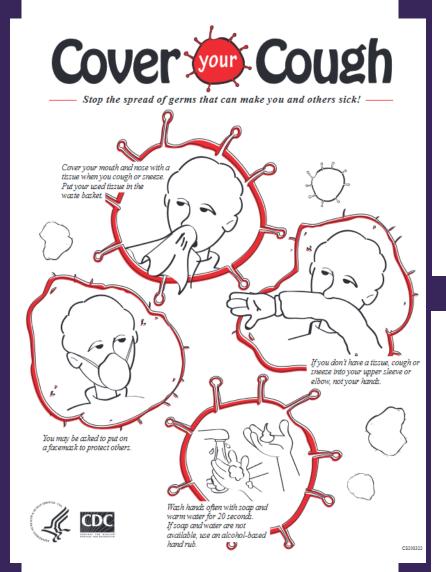




#### Respiratory Hygiene/Cough Etiquette

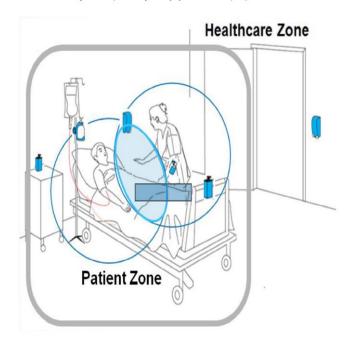




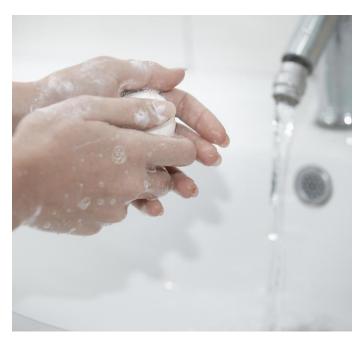












First Global Patient Safety Challenge Clean Care is Safer Care



Images, Kirk, et al., WHO, Yay Images

#### **Hand Hygiene**

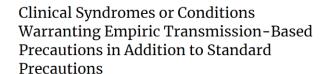












Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007)

Appendix A: Table 2







Clean their hands, including before entering and when leaving the room.



Make sure their eyes, nose and mouth are fully covered before room entry.

01



Remove face protection before room exit.



## Who Can Institute Isolation Precautions?

Review policy: For rapid response ANYONE should be able to initiate isolation precautions until clarification and orders are received. Don't waste time and potentially expose others.



#### Source Control Visitors and Staff

- Illinois
  - Restrict visitors under 18 years of age
  - Prevent introductions of colds, influenza, and potential COVID 19
  - Staff pre-screening prior to shift
- Chicago Metro Area
  - Essential visitors only (e.g. persons on hospice, dementia, psychosocial support) till
     March 18, 2020: Will review at that time
  - Restrict visitors under 18 years of age
  - Staff pre-screening prior to shift
- Contained Droplets
  - Mask use with training and monitoring per CDC Respiratory Etiquette and source control
- Rapid identification and source control
  - Continual monitoring of symptoms



#### **Controlling Group Contact**

- Reduce face to face opportunities for spread
  - Activities
  - Meals
  - Therapy
  - Beauty Shop
- Focus on virtual communication and visits (e.g. Face Time, Skype, closed circuit TV).
- Control unit to unit movement
- Cohort staff
- Cohort residents
- Prepare to restrict movement on affected units





#### **Presenteeism**

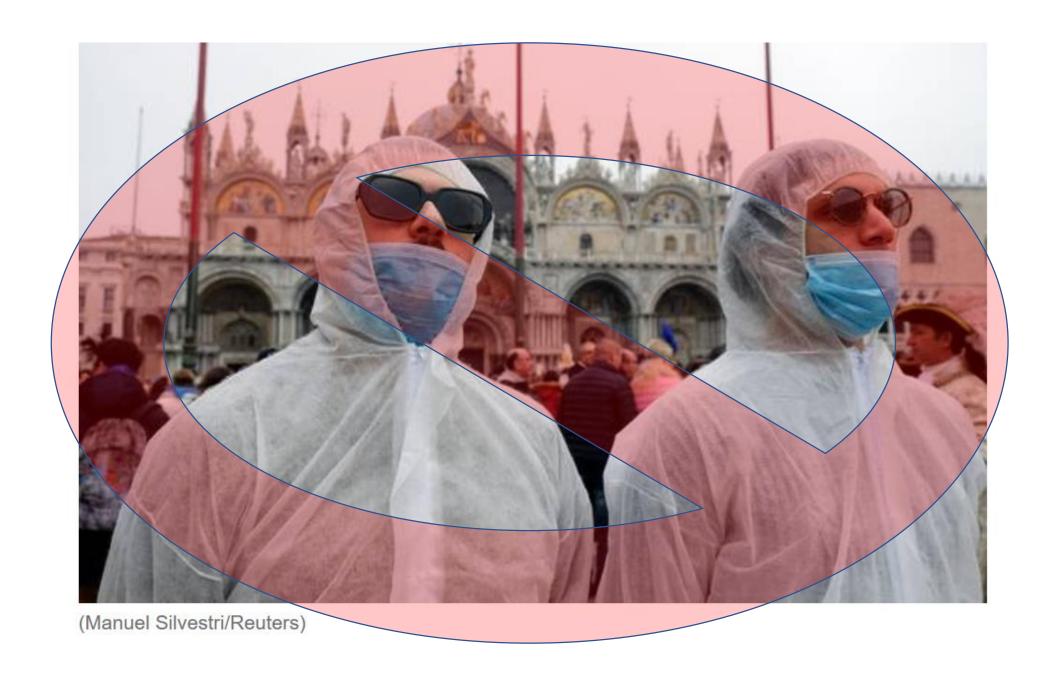
Ensure that employees do not stay at work when ill

 Don't force those under your supervision to participate in group activities if they are not feeling well

Provide support for staff



# **Source Control**



- Perform Hand Hygiene
- Remove Mask from Box wear yellow side out
- Place mask over nose, mouth and chin
- Fit flexible nose piece over nose bridge
- Secure on head with ties or elastic
- Adjust to fit
- Change when coming out of isolation room
- Change if soiled or touched when wearing in public areas
- The front of the mask is considered contaminated and should not be touched.
- Remove by handling only the ties or elastic bands starting with the bottom then top tie or band
- Lift the mask or respirator from the face and discard it into the trash
- Perform Hand Hygiene





















# Environmental Cleaning and Disinfecting

Images: YAY Images, Mommarazzi Images © 2018

## Ideal Disinfectant



- Nontoxic and non-irritating
- Low toxicity rating
- Not damage surfaces
- Easy to use
- Acceptable odor
- Economical
- One step cleaner / disinfectant
- Expand use to include entire interdisciplinary team including family and alert residents with teaching
- Frequent cleaning/disinfecting frequently touched areas

# Equipment Use, Cleaning, Disinfecting

- Dedicate medical equipment for patient care if at all possible.
- Routine cleaning and disinfecting
- EPA registered hospital grade disinfectant"...demonstrated effectiveness against viruses similar to SARS-CoV-2 (COVID-19) on hard nonporous surfaces."
- Wet contact times known by users
- Ensure that environmental cleaning and disinfection procedures are followed consistently and correctly
- If no available EPA-registered products approved as emerging viral pathogen claim for SARS-CoV-2 (COVID 19), products with label claims against human coronaviruses should be used according to label instructions.



#### **Inventory Control**

- Work with vendors
- Assign responsibility for inventory control from entry into facility to point of use
- Staff need access at point of use



What Should Healthcare Providers do if they identify a potential Patient Under Investigation



#### Immediately notify Infection Prevention



Immediately notify the Local Health Department



Local health department will notify State Health Department



State health departments immediately contact CDC's Emergency Operations Center (EOC) at 770-488-7100



Health Department will Complete a 2019-nCoV PUI case investigation form available at CDC 2019-nCoV website

#### Reminders:



Maintain confidentiality



Share information in a manner that protects confidentiality of the protected health information





# Realize we are part of a larger healthcare community and must work together in a spirit of cooperation.



